RECOVERY OF CONTINENCE FUNCTION IN PATIENTS AFTER RADICAL RETROPUBIC NERVE-SPARING PROSTATECTOMY.

Hypothesis / aims of study
Urinary incontinence (UI) as a complication after radical retropubic prostatectomy (RPE) has a profound impact on patient quality of life. The role of nerve-sparing (NS) technique is still controversial.

Study design, materials and methods
We evaluated a consecutive series of 209 patients, from 2007 till 2010, who underwent open RPE. They were divided into 2 groups (p > 0.05). In the 1st group (n = 106, average age 58.08 ± 5.84, PSA median 8.93 ng/ml, erectile function domain (EF) to International Index of Erectile Function (IIEF) 26.35 ± 4.14 ) the patients underwent RPE using uni- or bilateral NS technique; in the 2 group (n = 103, average age 60.37 ± 5.22, PSA median 10.07 ng/ml, EF to IIEF 17.89 ± 3.73) the NS technique was not applied. Urine continence was defined as the absence of urinary leakage with the possible usage of 1 pad per day. Grade I stress UI – usage of 1-2, grade II – 3, grade III– more than 3 pads per day. Potency recovery was defined as ability to achieve and maintain an erection suitable for sexual intercourse with/without phosphodiesterase type 5 inhibitors.

Results
In a month after the removal of urethral catheter in the 1st group the continence was attained at 57.8% patients, in the 2nd group – at 20.7%. One year after surgery 97.3% and 90.4% patients were continent in group 1 and 2. Only grade I stress UI was found in 2.7% and 9.6% patients in group 1 and 2 (p < 0.05). No patient had grade II and III stress UI. In group 1 one year after surgery potency recovery rate was 64.8% in men with bilateral NS-RPE and 40.7% in men with unilateral one.

Interpretation of results
In whole in group 1 the weak negative correlation was revealed between potency and urine continence recovery (r = -0.2). But in patients with potency recovery the moderate negative correlation was revealed (r = -0.6).

Concluding message
The incidence of stress UI after NS-RPE is lower than in non-nerve-sparing one. Besides this, recovery of urine continence is highly associated with a potency recovery rate (NS technique). Therefore, nerve-sparing should be attempted in all patients if the principles of oncological surgery are not compromised.

Disclosures
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